

**REMARKS****Interview Request**

Applicants respectfully request a telephonic interview after the Examiner has reviewed the instant response and amendment. Applicants request the Examiner call Applicants' representative at 858 720 5133.

**Status of the Claims***Pending claims*

Claims 1 to 7, 9 to 12, 16, 17 and 28 to 55 are pending. Claims 34, 35, 38 and 44 have been withdrawn. Thus, claims 1 to 7, 9 to 12, 16, 17, 28 to 33, 36, 37, 39 to 43, and 45 to 55 are pending and under consideration.

*Canceled claims*

Claims 17, 45, 50 and 54 are canceled without prejudice or disclaimer. Thus, after entry of this amendment, claims 1 to 7, 9 to 12, 16, 28 to 33, 36, 37, 39 to 43, 46 to 49, 51 to 53 and 55 will be pending and under consideration.

*Allowed claim*

Applicants thank the Examiner for finding claim 16 allowable.

*Outstanding Rejections*

The rejection of claims 16 and 50 to 54 under 35 U.S.C. §112, second paragraph, is maintained. The rejection of claim 17 and claims 50 to 54 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the invention (written description requirement) is maintained. The rejection of claims 1 to 7, 9 to 12, 17, 28 to 33, 36, 37 and 45 to 55 under 35 U.S.C. §112, first paragraph, as allegedly not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention (enablement requirement) is maintained.

Applicants respectfully traverse all outstanding objections to the specification and rejection of the claims.

#### Support for the Claim Amendments

The specification sets forth an extensive description of the invention in the amended claims in this and previous responses. For example, support for nucleic acids having various sequence identities to the exemplary sequences of the invention can be found, inter alia, in paragraphs [0173] and [0174], of U.S. Patent publication no. 20020132997. Support for nucleic acids that hybridize to exemplary sequences of the invention under highly stringent conditions can be found, inter alia, in paragraphs, [0066] and [0163] to [0172] of U.S. Patent publication no. 20020132997. Accordingly, Applicants submit that no new matter has been introduced and the instant amendment can be properly entered.

Applicants respectfully request entry of the amendments set forth in this response under 37 CFR §1.116. The amendment places the case in condition for allowance and places the case in better condition for appeal; the amendment does not raise any issues of new matter; and, the amended claims do not present new issues requiring further consideration or search.

#### Claim Objections

The Patent Office had concerns regarding the grammatical structure of claim 46 (see page 2 of the OA). The instant amendment addresses this issue.

#### Issues under 35 U.S.C. §112, second paragraph

The rejection of claims 16 and 50 to 54 under 35 U.S.C. §112, second paragraph, is maintained. The Office has concerns regarding the phrase “active site of the polymerase.” While Applicants’ respectfully traverse, maintaining that one skilled in the art would understand the bounds of a claim encompassing identification of an enzymatic (polymerase) active site when read in light of the specification, the claims are amended to expedite prosecution of this application. The instant amendment addresses this issue.

Issues under 35 U.S.C. §112, first paragraph

Applicants respectfully request consideration of these remarks and reconsideration of Applicants' responses of September 17, 2004, and August 25, 2004.

Written Description

The rejection of claim 17 and claims 50 to 54 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the invention (written description requirement) is maintained.

While Applicants respectfully aver that the specification describes the claim limitations sufficiently clearly that one having ordinary skill in the pertinent art would recognize from the disclosure that Applicants invented the claimed subject matter and were in possession of the claimed invention, the claims are amended to expedite prosecution of this application. The instant amendment addresses this issue. After entry of the instant amendment, the pending claims will encompass a genus of polynucleotides having 95% sequence identity to the exemplary SEQ ID NO:1, or a genus of polynucleotides that hybridize under highly stringent conditions to the exemplary SEQ ID NO:1.

Applicants respectfully submit that the amended claims encompassing the claimed polymerase-encoding nucleic acids meet the written description requirement under 35 U.S.C. §112, first paragraph.

CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectfully aver that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §112, first and second paragraphs. The amendment places the case in condition for allowance, does not raise any issues of new matter and the amended claims do not present new issues requiring further consideration or search. Applicants respectfully submit that all claims pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Applicants believe that no additional fees are necessitated by the present response and amendment. However, in the event any such fees are due, the Commissioner is hereby authorized to charge any such fees to Deposit Account No. 03-1952 referencing docket no. 564462001613. Please credit any overpayment to this account.

After the Examiner has reviewed this after final response and amendment, if the Examiner believes a telephonic interview would help expedite prosecution, please call Applicants' representative at (858) 720-5133.

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Respectfully submitted,

By 

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